

A NEW SPECIES REPRESENTING THE FIRST RECORD OF THE FAMILY TEUTONIIDAE FROM CHINA (ACARI, HYDRACHNELLAE, LEBERTIOIDEA)

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Abstract A species of the family Teutoniidae Koenike, 1910, which is a new record to China, is described: *Teutonia* (Subteutonia) *pilosea*. The pectinated peg-like setae, the number of palpal setae and only partially surrounded (open medially) *Ep* easily distinguish this species from others in the group. The disposition of glandularia and ocularia in the new species are described and illustrated in detail.

Key words Acari, Lebertioidea, Teutoniidae, *Teutonia*, new species, new record.

The water mite family Teutoniidae is currently represented by two genera, *Teutonia* Koenike, 1889 and *Limnolegeria* Motas, 1928 and the former is divided into the subgenera *Teutonia* and *Subteutonia* Habeeb, 1958. The family is not particularly diverse, with only seven species named from around the world.

We have discovered the first representatives of the family from China, which represents a new species, here named *Teutonia* (Subteutonia) *pilosea*. The distribution of glandularia is illustrated in detail. The type specimens of the new species are deposited in the Institute of Entomology, Guizhou University. Measurements in the text are given in μm .

The abbreviations and terms used in text follow Jin (1997): *A*₁, *A*₂: antennal glandularia 1 and 2. *D*₁-*D*₄: dorsoglandularia 1-4. *E*₁-*E*₄: epimeroglandularia 1-4. *L*₁-*L*₄: lateroglandularia 1-4. *O*₁, *O*₂: ocularia 1 and 2. *V*₁-*V*₄: venteroglandularia 1-4. *Ep* -*Ep*: epimera - . AEG: anterior epimeral group (*Ep* + *Ep*). *Ap*: anal pore. *Gf*: entire genital field, width measured by outer margin of both sides. *Ib*: infracapitulum bay (capitular bay). PEG: posterior epimeral group (*Ep* + *Ep*). MD PEG: median distance of post-median angle of *Ep*. ML AEG: median length from posterior limit of *Ib* to posterior end of *Ep*. ML *Ep*: median length from posterior limit of *Ib* to posteriorend of *Ep*. *Ib*-*Ap*: distance between posterior limit of *Ib* and edge of *Ap*. *b*-*Gf*: distance from *Ib* to anterior edge of *Gf*. *b*-PEG: distance between *Ib* to the median angle of PEG. -*L*-3-6, etc: first leg's segment 3-6, etc. *P*-

-*P*: palpal segment 1-5.

Teutoniidae Koenike, 1910

Koenike, 1910. Abh. Naturw. Ver. Bremen, 20: 144. Type genus: *Teutonia* Koenike, 1889.

Diagnosis. See Cook (1974) and Gerecke (1988).

Genus *Teutonia* Koenike, 1889

Koenike, 1889. Zool. Anz., 12: 104. Type species: *Teutonia cometes* (Koch).

Diagnosis. Cook (1974).

Subgenus *Subteutonia* Habeeb, 1958

Habeeb, 1958. Leaflets Acadian Biol., 18: 1. Type species: *Teutonia setifera* Habeeb, 1958.

Diagnosis. Characters of the genus *Teutonia*; ventral side of *P* without a ventral projection; *E*₄ on *Ep* may be either completely surrounded by sclerotization or only partially surrounded (open medially). *P* with a very long lateral seta. *P*-*V* divided.

Teutonia (Subteutonia) *pilosea* sp. nov. (Figs. 1-8)

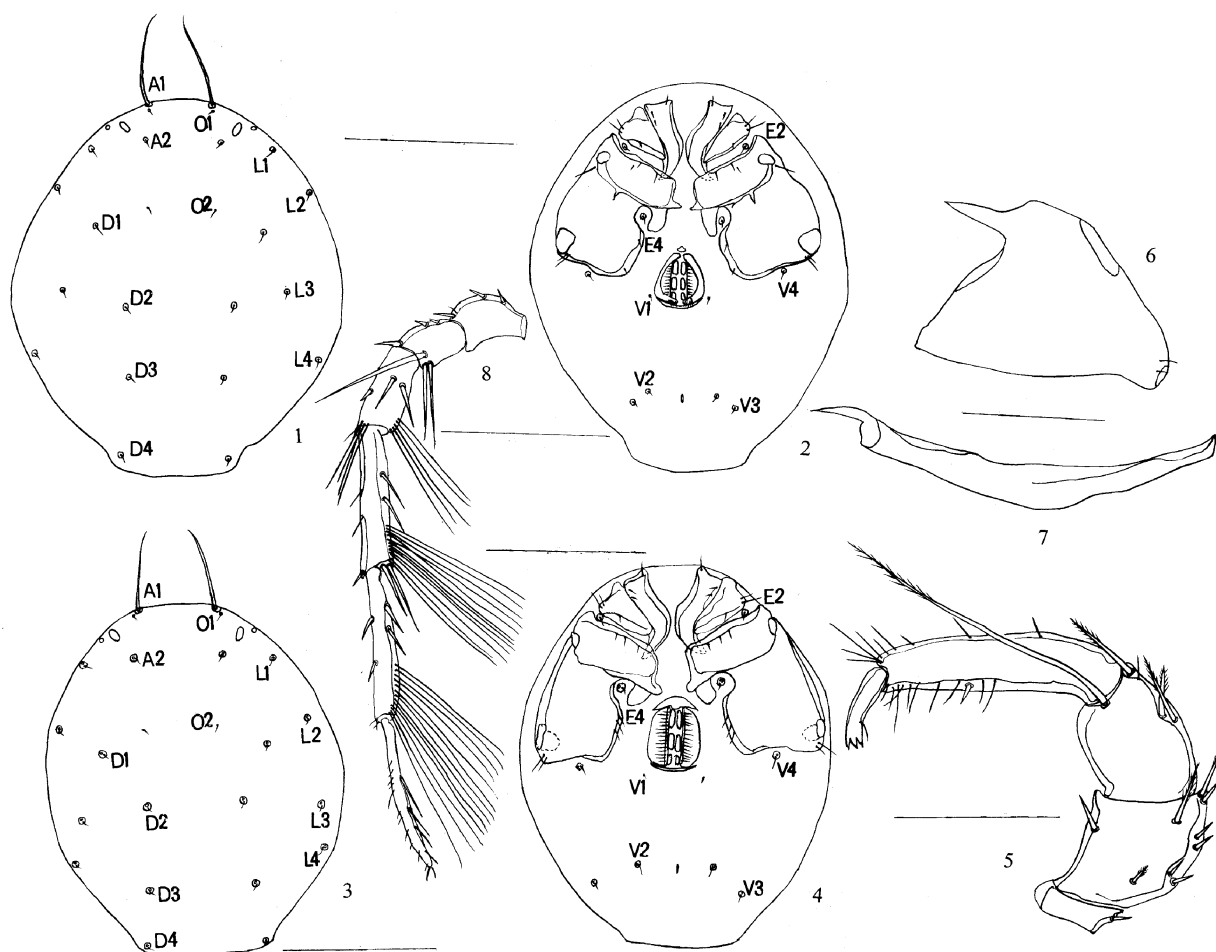
Male. Body oval, 1 099 in length, 949 in width. Integument soft, faintly lined. Lateral eyes not in capsule; median eye absent. *A*₁ very long and smooth; *O*₁ closely posterior to *A*₁; distance between *A*₂ longer than that between either *A*₁, or *O*₁ and or *O*₂. Four epimeral groups; distance between anterior tip of *Ep* to posterior end of *Ep* 541; AEG 206 in length, posterior apodeme ceratoid, extend under PEG. Distance between *Ep* small, just a suture, 1.7 in width; *Ep* with a small median apodeme, distance between *Ep*

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43, median edge of PEG 327 in length. E_2 at the place between AEG and PEG, E_4 at the ante-median angle, only partially surrounded (open medially). Gf 184 in length, the widest part 101 in width; genital flaps well developed, with 3 pairs of elongated acetabula. Posterior part of acetabula plate with many setae, postgenital sclerites narrow. V_1 at both sides of Gf, V_2 at both sides of Ap, V_4 under the posterior edge of Ep. Distance between posterior edge of AEG to anterior edge of Gf 164, distance between posterior edge of AEG to Ap 559. Infracapitulum 171 in length, dorsal apodeme sharp, without ventral apodeme; chelicera 238 in length. Dorsal lengths of palp segments: P^- , 26; P^- , 101; P^- , 76; P^- , 153; P^- , 38. P^- with a small dorsal peg-like seta. P^- with 9 peg-like setae, of which the most anterior one and the lateral two

pectinated; P^- with 3 peg-like setae, 1 seta and 1 heavy seta, of which 3 peg-like setae and 1 heavy seta pectinated, the most anterior dorsal peg-like seta longer than the other peg-like seta, but not exceed half of P^- ; the heavy seta longest, exceed the length of P^- , almost reach to the tip of P^- . P^- with 10 ventral normal setae and 1 small peg-like seta and 9 dorsal setae. P^- with 1 ventral seta, claw divided. Dorsal lengths of L^- terminal segments: $-L-4$, 191; $-L-5$, 179; $-L-6$, 217; Dorsal lengths of L^- terminal segments: $-L-4$, 194; $-L-5$, 219; $-L-6$, 231. L^- and L^- without swimming seta, swimming setae on legs: $L^- -3$, 5; $L^- -4$, 15; $L^- -5$, 11; $L^- -3$, 5; $L^- -4$, 12; $L^- -5$, 14. L^- without claw but two setae-like structures at the tip of leg.



Figs. 1-8. *Teutonia* (*Subteutonia*) *piloseta* sp. nov. 1. Dorsum. 2. Venter. 3. Dorsum. 4. Venter. 5. Palp. 6. Infracapitulum. 7. Chelicera. 8. $-L-4$, 5 and 6. Scale bars: 1-4 = 500 μ m, 5-7 = 100 μ m, 8 = 250 μ m.

Female. Body 1 119 in length, 991 in width. Distance between anterior tip of Ep to posterior end of Ep 581; AEG 450 in length, median suture 15. Ep with a bigger median apodeme than that of male,

distance between Ep 151, median edge of PEG 379. Gf 293 in length, 165 in width. Distance between posterior edge of AEG to anterior edge of Gf 124, distance between posterior edge of AEG to Ap 651. Infracapitulum

lum 199 in length, chelicera 290 in length. The most anterior peg-like seta longer than male's, exceed half of P^- . Dorsal lengths of the palp segments: P^- , 33; P^- , 110; P^- , 86; P^- , 173; P^- , 53. Dorsal lengths of L^- terminal segments: $-L-4$, 210; $-L-5$, 220; $-L-6$, 285; dorsal lengths of L^- terminal segments: $-L-4$, 249; $-L-5$, 244; $-L-6$, 285. Swimming setae on legs: L^- -3, 6; L^- -4, 15; L^- -5, 11; L^- -3, 6; L^- -4, 12; L^- -5, 14.

Colour. Rufous, eyes almost dark.

Holotype, slide 1998-X-231, Maolan (25°09' - 25°20' N, 107°52' - 108°45' E), Libo, Guizhou, 23 Oct. 1998, by GUO Jian-Jun. Paratypes: 1, slides 1998-X-232, same date and location as for holotype; 2, slides 1998-X-241 and 1998-X-242, 24 Oct. 1998, same location as for holotype, by GUO Jian-Jun.

Remarks. There are only 2 species belonging to Subteutonia, and the new species can be separated easily from the known species: Teutonia (Subteutonia) setifera by the pectinated peg-like setae, the number of palpal setae and only partially surrounded (open medially) Ep.

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中国新纪录科条顿螨科及其一新种记述（蜱螨亚纲，水螨群，腺水螨总科）

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摘要 记述了中国新纪录科条顿螨科 Teutoniidae Koenike, 1910 条顿螨属 Teutonia 亚条顿螨亚属 Subteutonia 及其 1 新种多毛条顿螨 Teutonia (Subteutonia) piloseta sp. nov.。新种

关键词 腺水螨总科，条顿螨科，条顿螨属，新纪录，新种。
中图分类号 Q969. 226

须肢羽状栓毛及栓毛数量以及呈半包围状态的 Ep 可以将其与其他亚条顿螨亚属种类区别。文中对其腺毛和眼毛的体位特征做了详细描述。